

# Greenbank Electronics

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Keep your masters from Hisoft Write-Protected (window open) at all times. Format some 3.5" diskettes first (I shall call these "blank disks" in what follows) and then carry out the following procedure:

1. CP/M Plus Master disk (or a good working copy) in drive A, nothing in B.
2. Press reset and Boot up.
3. Type "PIP", wait for the "\*" prompt.
4. Place Hisoft Master on A.
5. Place "blank" disk on B.
6. Type "B:=A:\*. \*[OV]" (but not the "'s).
7. Observe the copying procedure and note that there are no Verify errors reported. If there are, then to be safe, the "blank disk" must not be used until it is reformatted again. Tell me if you get this error (and preferably give me a printout of all the steps by pressing "CTRL-P" at stage 3).
8. If there are no errors reported at stage 7 then:
9. Remove the copy Hisoft disk from B (it originally was "blank" but now has all the Hisoft files).
10. Keep repeating steps 5 to 9 until you have sufficient copies for your needs. Note we take all the copies from the master, and we check for no "verify" errors each time a copy is made.
11. Put your Hisoft master away safely.
12. Press "CTRL-C".
13. Replace your CP/M Plus master (or good copy) in A
14. Put a Hisoft (copy) disk (was originally blank) on drive B.
15. Type "GENLDR", and follow the usual procedure to put the CP/M Plus disk operating system onto all the Hisoft (copy) disks. Use PIP to transfer any other files you might need.

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Note that you should not put your CP/M Plus System on the Hisoft Master disks - this would mean you would have to break the rule "Keep the Hisoft Master Disk write-protected at all times".

16. Keep one of the Hisoft copied disks safe (and write protected) so that you can use this as your "1st working copy" to make more later, if experience with the other copies made at the same time proves that the whole copying procedure has gone satisfactorily.

You will appreciate that any defect in the copying procedure will result in a copy which is defective, and all future copies will be equally defective. Indeed if there is something wrong with your system then further copies will get worse and worse.

Note that during a "write" operation to a disk (eg during formatting, copying, or just plain using) you must never turn off the computer or even press reset. Each sector contains 512 bytes, and if you press reset in the middle of writing them the "crc" (cyclic redundancy check) byte at the end will be incorrect, similarly the ident crc if you press reset when an address ident is being written. Future accesses to a disk where this has happened will inevitably cause operating system errors. If it happens during formatting time you have created a "time bomb" which will only activate at the future when the bad sector is accessed - up to then it will appear perfectly normal.